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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,858	12/05/2001	Arumugam Manthiram	05670P004	7142

8791 7590 12/17/2004

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EXAMINER

MARTIN, ANGELA J

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/010,858

Applicant(s)

MANTHIRAM ET AL.

Examiner

Angela J. Martin

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,7-11,13-24 and 26-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,12 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/03,2/02,12/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 4, 5, 7-11, 13-24, 26-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected method and species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 11, 2004.
2. Applicant's election with traverse of claims 1, 2, 3, 6, 10, 12, 13, 18, 20, 25, and 30 in the reply filed on August 11, 2004 is acknowledged. The traversal is on the ground(s) that "examination of claims 1-30 on the merits would impose no additional burden on the Patent Office". This is not found persuasive because the inventions of Group I and Group II are distinct, and the previously described species are distinct. In addition, elected claims 10, 13, 18, 20, and 30 must be withdrawn because they have a different species (claims 10, 18, 20, and 30 include Mn in the modification material; claim 13 is dependent on non-elected claim 11) than that elected by the Applicant.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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4. Claims 1-3, 6, 12 are rejected under 35 U.S.C. 102(a) as being anticipated by Park et al., J. Electrochem. Society.

Rejection of claims 1-3, 6, 12 drawn to an electrode material.

Park et al., teach an electrode material comprising a surface/chemically modified positive electrode (cathode) material, wherein the modification is ceramic (abstract). It teaches the composition wherein the modification is  $\text{Li}_x\text{Ni}_{1-y}\text{Co}_y\text{O}_2$ , when  $x=1$  and  $y=1$  ( $\text{LiCoO}_2$ ) (abstract) and the positive electrode material is  $\text{LiMn}_2\text{O}_4$  (abstract). It teaches the modification is  $\text{Li}_x\text{Ni}_{1-y}\text{Co}_y\text{O}_2$ , when  $x=1$  and  $y=1$  ( $\text{LiCoO}_2$ )(abstract).

Thus, the claims are anticipated.

5. Claim 25 is rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Park et al., J. Electrochem. Society.

Rejection of claim 25 drawn to an electrode material.

Park et al., teach an electrode material comprising a surface/chemically modified  $\text{LiMn}_2\text{O}_4$  spinel oxide (abstract). Claim 25 is a product-by-process claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Thus, the claim is anticipated.

However, if the claim is not anticipated, in the alternative, it is obvious because Park et al., teach the same product as in the Application.

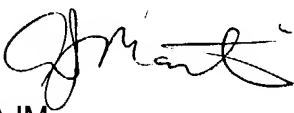
***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cho et al., Electrochem. and Solid-State Letters, teach a  $\text{LiMn}_2\text{O}_4$  cathode coated with  $\text{LiCoO}_2$ .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela J. Martin whose telephone number is 571-272-1288. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
AJM